

AN 1992-313570 [38] WPIDS  
DNC C1992-139380  
TI Mfg. copper alloy for metal moulds for moulding  
plastics - by solution treating alloy at specified temperature after hot  
forging,  
cooling at specified rate, cold working and ageing at specified temperature.

DC A32 M26

PA (NIHA) NIPPON MINING CO

CYC 1

PI JP 04221032 A 19920811 (199238)\* 4<--

ADT JP 04221032 A JP 1990-413304 19901221

PRAI JP 1990-413304 19901221

AB JP 04221032 A UPAB: 19931006

The Cu alloy contains 0.1-4.0 weight% Ti and  
balance Cu, with opt. 0.001-3.0 weight% of at least one of  
Zn, P, Sn, As, Cr, Mg, Mn, Sb, Fe, Co, Al, Zr, Ti, Si,  
Ag, Pb, B, Ni and lanthanoids as sub-components, and with unavoidable  
impurities, comprises: solution treating the Cu alloy at  
600 deg.C or higher after hot forging; cooling at a rate of 1 deg.  
C/sec. or higher; and after cold working at a draught of  
20% or more, ageing at 250-500 deg.C.

Cu alloy having excellent mechanical properties,  
thermal conductivity, and high temperature impact strength was pref. obtd. by  
subjecting a Cu alloy containing 0.05% Be and 3.0 Ti, to a  
process which comprises solution treating at 850 deg.C and cooling at a rate  
of 10 deg.C/sec., cold working at a draught of 40%,  
and ageing at 420 deg.C for 7 hrs.

USE/ADVANTAGE - Enables production of metal moulds having improved  
strength and thermal conductivity. The moulding of plastics can be  
shortened and the productivity can be increased.

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